



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/584,685

06/28/2006

Istvan Gorog

PU040005

4966

24498

7590

09/02/2009

Thomson Licensing LLC

P.O. Box 5312

Two Independence Way

PRINCETON, NJ 08543-5312

EXAMINER

PATEL, ASHOK

ART UNIT

PAPER NUMBER

2889

MAIL DATE

DELIVERY MODE

09/02/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/584,685	<b>Applicant(s)</b> GOROG ET AL.	
	<b>Examiner</b> Ashok Patel	<b>Art Unit</b> 2889	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-17 is/are allowed.
- 6) ☒ Claim(s) 1 and 5 is/are rejected.
- 7) ☒ Claim(s) 2-4 and 6-9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>062806</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

Art Unit: 2889

1. The disclosure is objected to because of the following informalities: Claim 4, line 2: after the term "barrel shaped", -and- needs to be inserted. Appropriate correction is required.

2. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, last line: the term "the register correction" lacks proper antecedent basis. The claim mentions the "register correction coils", not "register correction".

Claim 6, line 1: the term "the quadrupole coils" lacks antecedent basis. Claim 5 or claim 1 does not recite the quadrupole coils. It appears that claim 6 should depend upon claim 2 since claim 2 recites the quadrupole coils.

Claims 2-5 and 7-9 are necessarily rejected due to their dependencies on claim 1.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 2889

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Chujo (GB 2344984, of record).

As to claims 1 and 5, Chujo discloses applicant's claimed CRT (at least Figures 1, 10-19, 25 and 26; description at pages 1, lines 7-10; page 2, line 21 to page 4, line 6; page 8, line 20 to page 10, line 9; page 18, line 6 to page 27, line 19) including:

a glass envelope (16) having a rectangular faceplate panel and a tubular neck connected thereto by a funnel;

an electron gun, having electrostatic astigmatism correction, positioned in the neck for directing electron beams toward the faceplate panel;

a yoke (13) positioned in the neighborhood of the funnel-to-neck junction, the yoke having windings configured to apply a horizontal deflection yoke field and a vertical deflection yoke field to the beams;

at least one magnetic field sensor (2) located near the glass envelope for sensing an ambient magnetic field environment of the CRT;

a controller (microcomputer 3) receiving a signal from the magnetic field sensor; and

Art Unit: 2889

register correction coils and multipole coils (15, 14), the register correction coils being mounted in the vicinity of the neck and being dynamically controlled by the controller to shift the beams; the multipole coils applied to the neck and having adjacent poles of alternating polarity such that the resultant magnetic field being dynamically controlled by the controller based on the magnetic field sensor signal moves outer ones of the beams to correct a misconvergence caused by the register correction.

5. Claims 2-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 2-4 and 7-9, prior art of the record does not disclose applicant's claimed CRT, wherein the multipole coils are quadrupole coils, the quadrupole coils includes a set of vertical quadrupole coils being oriented at  $45^\circ$  from the CRT axes such that the resultant magnetic field being dynamically controlled by the controller based on the magnetic field sensor signal moves outer ones of the beams vertically to correct the misconvergence.

Art Unit: 2889

As to claim 6, prior art of the record does not disclose applicant's claimed CRT, wherein the quadrupole coils are located in the vicinity of a dynamic astigmatism point of the electron gun such that adjustment of an electrostatic astigmatism voltage has no affect on spot shape.

6. Claims 10-17 are in the condition for allowance since prior art of the record does not disclose applicant's claimed CRT including:

- a glass envelope having a rectangular faceplate panel and a tubular neck connected thereto by a funnel;

- an electron gun positioned in the neck for directing electron beams toward the faceplate panel;

- a yoke positioned in the neighborhood of the funnel-to-neck junction, the yoke having windings configured to apply a horizontal barrel shaped field and a vertical pincushion shaped field to the beams, the horizontal barrel field shape being adjusted to give an optimized spot shape at sides of the screen, causing an overconvergence of the beams at the sides of the screen;

- at least one magnetic field sensor located near the glass envelope for sensing an ambient magnetic field environment of the CRT;

a controller receiving a signal from the magnetic field sensor;

register correction coils being mounted in the vicinity of the neck and being dynamically controlled by the controller to shift the beams; and

quadrupole coils applied to the neck and having adjacent poles of alternating polarity such that the resultant magnetic field being dynamically controlled by the controller based on the magnetic field sensor signal moves outer ones of the beams to correct a misconvergence caused by the register correction coils, the quadrupole coils also being dynamically controlled by the controller to correct overconvergence at the sides of the screen caused by the yoke.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok Patel whose telephone number is 571-272-2456. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minh-Toan Ton can be reached on 571-272-2303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system,

Application/Control Number: 10/584,685

Page 7

Art Unit: 2889

see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Ashok Patel/  
**Ashok Patel**  
**Primary Examiner**  
**Art Unit 2889**